winged shield member are engaged in said first circumferential groove.

6. A medical device according to claim 5, wherein:

said second locking means comprises a plurality of ratchet teeth radially extending inwardly from said inner surface of said hollow outer winged shield member; and

said first locking means comprises a plurality of ratchet teeth radially extending outwardly from said outer surface of said innter tube member.

7. A medical device according to claim 1, wherein:

said inner surface of said winged shield member is substantially cylindrical,

said open rear end of said hollow outer winged shield member has at least two slots along longitudinal axes parallel to a long axis of said winged shield member, said slots causing said at least one inner protrusion to form inwardly extending lugs; and

said inner tube member further includes at least one substantially flat rear rotational locking wing extending generally radially from said tube member, said rear rotational locking wing extending through and locking with one of said at least two slots in said outer winged shield member when said inwardly extending lugs of said outer winged shield member are engaged in said first circumferential groove thereby preventing said outer winged shield member from rotating relative to said inner tube member when said shield member is in said first retracted position.

8. A medical device according to claim 1, wherein:

said inner surface of said winged shield member is substantially cylindrical,

said tube member further comprises on its outer surface first locking means; and

said hollow outer winged shield member comprises on its inner surface second locking means,

said first and second locking means adapted to lock so as to prevent rotational motion of said outer winged shield member relative to said tube member when said at least one inwardly extending protrusion of said outer winged shield member is engaged in said first circumferential groove.

9. A medical device according to claim 8, wherein:

said second locking means comprises a plurality of ratchet teeth radially extending inwardly from said inner surface of said hollow outer winged shield member; and

said first locking means comprises a plurality of ratchet teeth radially extending outwardly from said outer surface of said inner tube member.

10. A medical device according to claim 1, wherein:

at least one of said outer surface of said inner tube member and said inner surface of said outer winged shield member is substantially non-cylindrical in shape to prevent relative rotation therebetween.

11. A medical device according to claim 10, for use on a patient, wherein:

said outer winged shield member includes an outer surface having a substantially flat portion running along substantially the entire longitudinal length of said outer winged shield member for placement adjacent the skin of the patient.

12. A medical device according to claim 11, wherein:

a cross-section through said inner surface of said outer winged shield member has a shape chosen from one of semi-circle, and a truncated oval.

13. A medical device according to claim 11, wherein:

at least one of said front end of said inner tube member and said outer winged shield member includes means for causing said hollow needle to assume an angle of less than ten degrees relative to a horizontal defined by the skin of the patient to which said winged shield member is attached.

14. A medical device according to claim 2, wherein:

said outer surface of said inner tube member further includes a shoulder section adjacently forward said second circumferential groove, said shoulder section of relatively constant diameter along an axis parallel to the longitudinal axis of said inner tube member, and

said inner surface of said winged shield member further includes a ramped section terminating in a recessed section which in turn terminates at said rear end of said winged shield member in said at least one protrusion, wherein said recessed section is arranged to reciprocate with said shoulder section of said inner tube member such that the forward end of said shoulder section abuts the termination of said ramped section of said winged shield member when said at least one protrusion is locked in said second circumferential groove in said extended position of said winged shield member.

15. A medical device according to claim 14, wherein:

said inner surface of said shield member is of substantially uniform diameter forward said ramped section of said inner surface of said shield member,

the area subscribed by said inner surface of said recessed section of said rear of said winged shield member is substantially equal to the area subscribed by the inner surface of the substantially uniform section of said winged shield member.

16. A medical device according to claim 14 for use on a patient, wherein:

said outer winged shield member has an outer surface with a substantially flat surface for placement adjacent the skin of the patient, and

said inner surface of said winged shield member and said outer surface of said inner tube member are of substantially the same over-all shape, with a cross-section through said inner surface of said outer winged shield member arranged to be a shape chosen from one of semi-circle, and a truncated oval.

17. A medical device according to claim 16, wherein

said outer winged shield member includes a plurality ribs extending outwardly from the outer surface of said outer winged shield member.

18. A medical device according to claim 1, wherein:

said outer winged shield member includes an outer surface with a substantially flat surface for placement adjacent the skin of the patient to which said winged shield member is attached, and at least one of said front end of said inner tube member and said winged shield member includes means for causing said hollow needle to assume an angle of less than ten degrees horizontal defined by the skin of the patient to which said winged shield member is attached.

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